

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A warpage angle measurement apparatus comprising:  
a constant temperature chamber for accommodating at least one of an optical disc and a cartridge for the optical disc as an object to be measured and adjusting a surrounding of the object to be measured to have a predetermined environmental condition;  
a laser ~~transmitter-oscillator~~ for causing laser oscillation to emit laser light to the object to be measured; and  
a light-receiving unit for receiving the laser light reflected from the object to be measured and detecting a relative angle of an optical path of the reflected laser light with respect to an optical path of the emitted laser light.

2. (Original) The warpage angle measurement apparatus according to claim 1, further comprising an arithmetic unit for calculating the relative angle of an optical path of the reflected laser light with respect to an optical path of the emitted laser light based on a position on the light-receiving unit at which the reflected laser light arrives.

3. (Currently Amended) The warpage angle measurement apparatus according to claim 1 ~~or 2~~, wherein  
the constant temperature chamber has a through hole for allowing the laser light to pass therethrough, and the laser ~~transmitter-oscillator~~ and the light-receiving unit are arranged outside the constant temperature chamber.

4. (Original) The warpage angle measurement apparatus according to claim 3, wherein

the through hole of the constant temperature chamber is closed with a light-transmitting member.

5. (Currently Amended) The warpage angle measurement apparatus according to ~~any one of claims 1 to 4~~claim 1, further comprising a mounting posture adjusting mechanism for holding the optical disc and the cartridge in the constant temperature chamber while the optical disc is mounted in the cartridge and for adjusting a mounting posture of the optical disc in the cartridge.

6. (Currently Amended) The warpage angle measurement apparatus according to ~~any one of claims 1 to 4~~claim 1, further comprising a rotating and driving mechanism for driving the optical disc to rotate.

7. (Original) The warpage angle measurement apparatus according to claim 5, further comprising a rotating and driving mechanism for driving the optical disc to rotate.

8. (Original) A warpage angle measurement method comprising: accommodating at least one of an optical disc and a cartridge for the optical disc as an object to be measured in a constant temperature chamber; adjusting an inside of the constant temperature chamber to have a predetermined environmental condition; and measuring an angle of warpage of the object to be measured by emitting laser light to the object to be measured, receiving the laser light reflected from the object to be measured, and detecting a relative angle of an optical path of the reflected laser light with respect to an optical path of the emitted laser light.

9. (Original) The warpage angle measurement method according to claim 8, wherein a through hole for allowing laser light to pass therethrough is provided in the constant temperature chamber so that the laser light is emitted from an outside of the constant temperature chamber to the object to be measured and the reflected laser light from the object to be measured is received in the outside of the constant temperature chamber.

10. (Original) The warpage angle measurement method according to claim 9, wherein the through hole of the constant temperature chamber is closed with a light-transmitting member so that the angle of warpage of the object to be measured is measured.

11. (Currently Amended) The warpage angle measurement method according to ~~any one of claims 8 to 10~~claim 8, wherein

the optical disc and the cartridge are held in the constant temperature chamber while the optical disc is mounted in the cartridge, and a mounting posture of the optical disc in the cartridge is adjusted to measure the angle of warpage of the optical disc.

12. (Currently Amended) The warpage angle measurement method according to ~~any one of claims 8 to 10~~claim 8, wherein

the angle of warpage of the optical disc is measured while the optical disc is driven to rotate.

13. (Original) The warpage angle measurement method according to claim 11, wherein

the angle of warpage of the optical disc is measured while the optical disc is driven to rotate.

14. (Currently Amended) The warpage angle measurement method according to ~~any one of claims 8 to 10~~claim 8, wherein

the laser light is emitted to the optical disc through an opening for transmitting information of the optical disc provided in the cartridge while the optical disc is mounted in the cartridge, and the reflected laser light from the optical disc is reflected to an outside of the cartridge.

15. (Original) The warpage angle measurement method according to claim 11, wherein

the laser light is emitted to the optical disc through an opening for transmitting information of the optical disc provided in the cartridge while the optical disc is mounted in the cartridge, and the reflected laser light from the optical disc is reflected to an outside of the cartridge.

16. (Currently Amended) The warpage angle measurement method according to ~~any one of claims 8 to 10~~claim 8, wherein

an opening for measurement is formed in the cartridge, the laser light is emitted to the optical disc through the opening for measurement while the optical disc is mounted in the cartridge, and the reflected laser light from the optical disc is reflected to an outside of the cartridge.

17. (Original) The warpage angle measurement method according to claim 11,  
wherein

an opening for measurement is formed in the cartridge, the laser light is emitted to the optical disc through the opening for measurement while the optical disc is mounted in the cartridge, and the reflected laser light from the optical disc is reflected to an outside of the cartridge.

18. (Currently Amended) The warpage angle measurement method according to ~~any one of claims 8 to 10~~claim 8, wherein

two constant temperature chambers are prepared and environmental conditions inside the two constant temperature chambers are set to have a different environmental condition from each other, and

the object to be measured is first accommodated in one of the two constant temperature chambers and is then carried into the other constant temperature chamber and thereafter the angle of warpage of the object to be measured is measured.

19. (Original) The warpage angle measurement method according to claim 11,  
wherein

two constant temperature chambers are prepared and environmental conditions inside the two constant temperature chambers are set to have a different environmental condition from each other, and

the object to be measured is first accommodated in one of the two constant temperature chambers and is then carried into the other constant temperature chamber and thereafter the angle of warpage of the object to be measured is measured.

20. (Original) The warpage angle measurement method according to claim 12, wherein

two constant temperature chambers are prepared and environmental conditions inside the two constant temperature chambers are set to have a different environmental condition from each other, and

the object to be measured is first accommodated in one of the two constant temperature chambers and is then carried into the other constant temperature chamber and thereafter the angle of warpage of the object to be measured is measured.

21. (Original) The warpage angle measurement method according to claim 14, wherein

two constant temperature chambers are prepared and environmental conditions inside the two constant temperature chambers are set to have a different environmental condition from each other, and

the object to be measured is first accommodated in one of the two constant temperature chambers and is then carried into the other constant temperature chamber and thereafter the angle of warpage of the object to be measured is measured.

22. (Original) The warpage angle measurement method according to claim 16, wherein

two constant temperature chambers are prepared and environmental conditions inside the two constant temperature chambers are set to have a different environmental condition from each other, and

the object to be measured is first accommodated in one of the two constant temperature chambers and is then carried into the other constant temperature chamber and thereafter the angle of warpage of the object to be measured is measured.